

#### REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

The Examiner has rejected claims 15, 21, 23 and 24 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 7,054,377 to Betts. The Examiner has further rejected claims 16, 18 and 19 under 35 U.S.C. 103(a) as being unpatentable over Betts in view of U.S. Patent 6,738,949 to Senda et al. Furthermore, the Examiner has rejected claim 20 under 35 U.S.C. 103(a) as being unpatentable over Betts in view of Senda et al., and further in view of U.S. Patent 5,699,365 to Klayman et al.

Applicants acknowledge that the Examiner has found claims 17 and 22 allowable over the prior art of record.

The Betts patent discloses a space diversity trellis interleaver system and method, in which a trellis decoder decodes a first and a second data stream.

As noted in MPEP §2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner has indicated that Betts discloses the claim limitation "wherein the second data map is configured to provide a higher gain to bits of the second data stream than the first data map provides to bits of the first data stream", indicating col. 4, lines 14-31, and stating "The patent specifically teaches that the first mapping defines each symbol with 8 bits while the second mapping defines each symbol with 6 bits, thus one providing a higher gain than the other".

Applicants believe that the Examiner is mistaken. Applicants have reviewed the noted section of Betts and finds that what is being disclosed therein is irrelevant to the claimed invention. However, Betts does state, at col. 6, lines 14-31:

"A second embodiment of the space diversity trellis interleaver system of the present invention is illustrated in FIGS. 3 and 4. FIGS. 3 and 4 illustrate a transmitter 60' and a receiver 60'', respectively, for implementing this second embodiment. An advantage of this second embodiment is that the data rates on the communication connections COMM1, COMM2 can be separately and independently regulated and changed, whenever appropriate, depending upon the noise conditions of each connection. The rates are changed via a data throttling, mapping, or other operation in connection with each communication path. As an example, on one path, a mapping operation could be used to define each symbol with 8 bits, whereas on the other noisier communication path the mapping could be set to define each symbol with 6 bits. Accordingly, the data rate of the former would be faster than the data rate of the latter, and the data rates can be independently changed, upon initialization or dynamically, to suit the particular channel noise conditions."

It should be apparent from the above that the difference between defining a symbol with 8 bits or 6 bits relates to the coarseness of the steps between each level. However, this has

nothing to do with the gain imparted by the second data map to bits of the second data stream as compared to the gain imparted by the first data map to bits of the first data stream. This "gain" is defined in the specification on page 4, line 8 to page 5, line 11.

The Senda et al. patent discloses an error correction circuit and error correction method, which teaches a deinterleaver and RS decoder coupled between a trellis decoder and a randomizer for error correction. However, Applicants submit that Senda et al. does not supply that which is missing from Betts, i.e., "wherein the second data map is configured to provide a higher gain to bits of the second data stream than the first data map provides to bits of the first data stream".

The Klayman et al. patent discloses an apparatus and method for adaptive forward error correction in data communications, which arguably teaches selectively enabling error correction using a set of operation parameters depending on the channel condition. However, Applicants submit that Klayman et al. does not supply that which is missing from Betts and Senda et al., i.e., "wherein the second data map is configured to provide a higher gain to bits of the second data stream than the first data map provides to bits of the first data stream".

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 15-24, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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